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SCHIEF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			EXAMINER KASSA, HILINA S	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/522,610

**Applicant(s)**

LA ROSA DUCATO ET AL.

**Examiner**

HILINA S. KASSA

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 01/27/05
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Preliminary Amendment***

1. The preliminary amendment submitted on 01/27/05 has been acknowledged.

***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 01/27/2005 is being considered by the examiner.

***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No.102 35 254.2, filed on 08/01/02.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 30, 42 and 47 contain the trademark/trade name Advanced Function Presentation™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218

USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name.

6. Claim 28 recites the limitation "a method according to claim 25 wherein the document processing system comprises" in claim 25, there is no disclosure of a document processing system. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. The claimed invention is directed to non-statutory subject matter. Claims 38-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 38-42 are drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

"Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized."

9. Claims 38-42, while defining a computer program product, does not define a "computer-readable medium" and is thus non-statutory for that reasons. A computer program product can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory.

"In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." - MPEP 2106.IV.B.1(a).

10. Claims 25-27 and 29-37 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584,588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876) and recent Federal Circuit decisions *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008) indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps/methods or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

a. Considering claim 25, claim 25 does not 1) explicitly recite a machine that accomplishes the claimed steps, and 2) none of the steps in the claim would "have to" (inherently) be performed by a machine. Thus, claim 25 is not a statutory process because it neither ties to another statutory category nor transforms the underlying subject matter to a different state or thing.

b. Claims 26-27 and 29-37 are rejected under 35 U.S.C. 101 for the same reason explained above for claim 1.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 25-29, 37-41 and 43-46 are rejected under 35 U.S.C. 102(a) as being anticipated by Nakagiri et al. (US Patent Number 7,031,001 B2).

**(1) regarding claim 25:**

As shown in figure 1 Nakagiri discloses a method for enhancement of an input document data stream which comprises at least one input format file comprising format definitions (**column 4, lines 10-13; note that input data is disclosed see also column 5, lines 25-30**) and an input document data file structured at least one of in ranges and sub-ranges and containing variable data (**column 7, lines 4-12; note that parameter is designated to the input document batch and batch binding is set for**

**the number of sheets i.e. considered as ranges and sub-ranges**), comprising the steps of:

enhancing the data stream with finishing commands (**column 7, lines 13-15; note that book binding is a finishing command for the print data**);

in a control file defining level structures that correspond to at least one of the ranges and the sub-ranges of the input document data file (**column 7, lines 15-20; note that the limitation of sheets per the finishing commands are set up to 15 sheets i.e. considered as the range and sub-range**);

in the control file associating the finishing commands with the level structures (**column 7, lines 27-30; note that the number of sheets get set to the appropriate value parameter**); and

using the control file, the input format file and the input document data file, automatically generating by a computer program module (**column 3, line 63-column 4, line 3; note that a print control program is disclosed in order to generate print data**)

an output format file that contains the finishing commands in callable groups (**column 5, lines 42-49; note that the input file is converted to an output file**), and

an output document data file containing the variable data and group calls associated by at least one of range-by-range and sub-range-by-sub-range (**column 6, lines 7-18; note that the spooler interprets the received print command, converts it into intermediate code in page units, and outputs the code to the spool file**).

**(2) regarding claim 26:**

Nakagiri further discloses a method according to claim 25 wherein in the control file the finishing commands and the levels are defined and it is registered which finishing commands are applied in which level (**column 7, lines 4-8; note that the binding setting information is a "binding setting" parameter to designate whether an input document is finished as one bound printed material or plural batch documents**).

**(3) regarding claim 27:**

Nakagiri further discloses a method according to claim 26 wherein in the control file it is established which processing commands are executed on which levels (**column 8, lines 58-64; note that the printer driver determines the batch-order setting for transmitting the batch documents to the printer in consideration of the specified finisher property and the opening direction setting designated by the user via the user interface, and upon book bind printing by printing plural batch documents, controls the order of the respective batch documents**).

**(4) regarding claim 28:**

Nakagiri further discloses a method according to claim 25 wherein the document processing system comprises a data production system that comprises a printing device and at least one device for processing of a print product at least one of before and after the printing event (**column 3, lines 31-38; note that a printer control system that has**



**a host computer and a printer is disclosed to process print data)**, and wherein the finishing commands activate at least one of the devices for processing of the print product at least one of before and after a printing event (**column 7, lines 4-8; note that the binding setting is part of the finishing command processing the print job**).

**(5) regarding claim 29:**

Nakagiri further discloses a method according to claim 25 wherein the data of the output format file and the data of the output document file are generated corresponding to one another with the computer program module (**column 6, lines 7-18; note that the output document file i.e. PDL and the output format file i.e. the settings are processed in the computer**).

13. The proposed rejection of Nakagiri, explained in the method claims 25-28, renders obvious the system and computer program product of claims 37-41 and 43-46 because the method is performed based on a system as explained in figures 1-5 and the computer program is implement as shown in figures 4-6 in order to perform the steps as discussed above. Thus, the arguments similar to that presented above for claims 25-28 are equally applicable to claims 37-41 and 43-46.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 30, 32-33, 42, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagiri et al. (US Patent Number 7,031,001 B2) and further in view of Marlin et al. (US Patent Number 5,680,615).

**(1) regarding claim 30:**

Nakagiri et al. disclose all of the subject matter as described as above except for specifically teaching wherein at least one of a resource-structured input document data stream and a resource-structured output document data stream comprises an Advanced Function Presentation™ data stream.

However, Marlin et al. disclose wherein at least one of a resource-structured input document data stream and a resource-structured output document data stream comprises an Advanced Function Presentation™ data stream (**column 4, lines 55-59; note that the print data from the customer application is processed by value-add applications and AFP functions that condition the data for printing**).

Nakagiri et al. and Marlin et al. are combinable because they are from the same field of endeavor i.e. data processing for printer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein at least one of a resource-structured input document data stream and a resource-structured output document data stream comprises an Advanced Function Presentation™ data stream. The suggestion/motivation for doing so would have been in order to design application

independent method so that it does not require changes in the customer's print producing applications in order to perform AFP function (column 5, lines 7-10).

Therefore, it would have been obvious to combine Nakagiri et al. with Marlin et al. to obtain the invention as specified in claim 30.

**(3) regarding claim 32:**

Nakagiri et al. disclose all of the subject matter as described as above except for specifically teaching wherein the input and output format definition files are respectively a formdef file, and the computer program module provides the output formdef file with modified medium maps relative to the input formdef file.

However, Marlin et al. disclose wherein the input and output format definition files are respectively a formdef file, and the computer program module provides the output formdef file with modified medium maps relative to the input formdef file (**column 15, lines 52-58; note that the print file name can be created and formdef file is provided**).

Nakagiri et al. and Marlin et al. are combinable because they are from the same field of endeavor i.e. data processing for printer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the input and output format definition files are respectively a formdef file, and the computer program module provides the output formdef file with modified medium maps relative to the input formdef file. The suggestion/motivation for doing so would have been in order to efficiently allow the same form to be used in different locales using different data formats. Therefore, it

would have been obvious to combine Nakagiri et al. with Marlin et al. to obtain the invention as specified in claim 32.

**(4) regarding claim 33:**

Nakagiri further discloses a method according to claim 30 wherein the output document file comprises a print file with variable print data, and the computer program module enhances the variable data with calls of medium maps of the output formdef file **(column 7, lines 31-43; note that the output document data has finishing commands i.e. variable print data).**

16. The proposed combination of Nakagiri and Marlin et al., explained in rejection of the method claim 30, renders obvious the system and computer program product of claim 47 and 42 because the method is performed based on a system as explained in figures 1-5 and the computer program is implement as shown in figures 4-6 in order to perform the steps as discussed above. Thus, the arguments similar to that presented above for claim 30 are equally applicable to claims 42 and 47.

17. Claims 31 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagiri et al. (US Patent Number 7,031,001 B2) and further in view of MO:DCA Reference (IBM Publication SC31-6802-05, see IDS).

**(1) regarding claim 31:**

Nakagiri et al. disclose all of the subject matter as described as above except for specifically teaching wherein at least one of a resource-structured input document data stream and a resource-structured output document data stream comprises at least one of an XML, PPML, PCL and PostScript data stream.

However, MO:DCA Reference teaches wherein at least one of a resource-structured input document data stream and a resource-structured output document data stream comprises at least one of an XML, PPML, PCL and PostScript data stream **(page 9, chapter 2, paragraph [0003], lines 4-6; note that MO:DCA documents are TIFF, EPS i.e. PostScript and single-page PDF).**

Nakagiri et al. and MO:DCA Reference are combinable because they are from the same field of endeavor i.e. processing data for printer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein a non-resource-structured file is read in and converted into a resource-structured input data file. The suggestion/motivation for doing so would have been in order to efficiently dictate the processing functions of mixed object documents (chapter 2, paragraph [0001]). Therefore, it would have been obvious to combine Nakagiri et al. with AFP and Line Data Reference to obtain the invention as specified in claim 31.

18. The proposed combination of Nakagiri and MO:DCA Reference, explained in rejection of the method claim 31, renders obvious the system claim 48 because the method is performed based on a system as explained in figures 1-5 in order to perform

the steps as discussed above. Thus, the arguments similar to that presented above for claim 31 is equally applicable to claim 48.

19. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagiri et al. (US Patent Number 7,031,001 B2) and further in view of AFP and Line Data Reference (IBM Publication S544-3884-02, see IDS).

**(1) regarding claim 31:**

Nakagiri et al. disclose all of the subject matter as described as above except for specifically teaching wherein at least one of a resource-structured input document data stream and a resource-structured output document data stream comprises at least one of an XML, PPML, PCL and PostScript data stream.

However, AFP and Line Data Reference teaches

**(2) regarding claim 34:**

Nakagiri et al. disclose all of the subject matter as described as above except for specifically teaching wherein a non-resource-structured file is read in and converted into a resource-structured input data file.

However, AFP and Line Data Reference teaches wherein a non-resource-structured file is read in and converted into a resource-structured input data file (**page 37, chapter 4, paragraph [0001], lines 5-8; note that the a non-resource data structure i.e. line data is mixed to the resource-structured MO:DCA**).

Nakagiri et al. and AFP and Line Data Reference are combinable because they are from the same field of endeavor i.e. processing data for printer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein a non-resource-structured file is read in and converted into a resource-structured input data file. The suggestion/motivation for doing so would have been in order to acquire a device independent data structure (chapter 2, paragraph [0001]). Therefore, it would have been obvious to combine Nakagiri et al. with AFP and Line Data Reference to obtain the invention as specified in claim 34.

**(3) regarding claim 35:**

Nakagiri et al. disclose all of the subject matter as described as above except for specifically teaching wherein the non-resource-structured file comprises a line data file.

However, AFP and Line Data Reference teaches wherein the non-resource-structured file comprises a line data file (**page 5, column 2, lines 1-4; note that line data is not already in MO:DCA i.e. resource-structure**).

Nakagiri et al. and AFP and Line Data Reference are combinable because they are from the same field of endeavor i.e. processing data for printer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the non-resource-structured file comprises a line data file. The suggestion/motivation for doing so would have been in order to acquire a device independent data structure (chapter 2, paragraph [0001]). Therefore, it would have been obvious to combine

Nakagiri et al. with AFP and Line Data Reference to obtain the invention as specified in claim 35.

**(4) regarding claim 36:**

Nakagiri et al. disclose all of the subject matter as described as above except for specifically teaching wherein the same computer program module as is used to prepare the resource-structured input file is used to convert the non-resource-structured file.

However, AFP and Line Data Reference wherein the same computer program module as is used to prepare the resource-structured input file is used to convert the non-resource-structured file (**page 5, chapter 2, paragraph [0005], lines 1-6; note that MO:DCA documents i.e. resource-structured are generated using the computer programs and applications**).

Nakagiri et al. and AFP and Line Data Reference are combinable because they are from the same field of endeavor i.e. processing data for printer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the same computer program module as is used to prepare the resource-structured input file is used to convert the non-resource-structured file. The suggestion/motivation for doing so would have been in order to acquire a device independent data structure (chapter 2, paragraph [0001]). Therefore, it would have been obvious to combine Nakagiri et al. with AFP and Line Data Reference to obtain the invention as specified in claim 36.



**Conclusion**

20. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore could be reached at (571) 272- 7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pari-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hilina S Kassa/  
Examiner, Art Unit 2625  
May 4, 2009

/David K Moore/  
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